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10/080,763	02/22/2002	Douglas R. Coffland	IL-10830	1205

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EXAMINER

HUNG, YUBIN

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/080,763

Applicant(s)

COFFLAND, DOUGLAS R.

Examiner

Yubin Hung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-31 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 08 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment/Arguments

1. This action is in response to amendment filed 03/08/2005, which has been entered.
2. Claims 1-31 are still pending.
3. In view of Applicant's amendment, the objection to the specification has been withdrawn.
4. Applicant's response to Examiner's objection to the drawings is not adequate. Therefore, the objection is maintained. Specifically, as recited in the Office action mailed 12/10/2004, Fig. 6 is neither a commonly accepted diagram showing the structural relationship of system components nor a flow chart showing functional steps (e.g., blocks 61, 64 and 68 are neither a system component nor a functional step; block 62 is a system component but not a functional step and block 65 is a functional step but not a system component).
5. In view of the applicant's amendment, the 35 USC § 112 rejections have been withdrawn. Note that Applicant's response is silent on Examiner's interpretation of the term "resolution" recited in claim 1; therefore the interpretation is considered as accepted by Applicant.

6. Applicant's arguments, see page 15, paragraphs 3 and 4 of the amendment filed 03/08/2005, with respect to the rejection(s) of claim(s) 1-12, 23, 24, 26 and 29-31 under 35 USC § 103 have been fully considered and are persuasive. Therefore, the rejections of those claims as well as claims 3, 4 and 8 (due to dependency) have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Morota et al. (US 6,919,921). See below.

DETAILED ACTION

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. The term "acceptable" in claims 1, 4, 8, 17 and 23 (see the last or the penultimate line of the claims) is a relative term which renders the claim indefinite. The term "acceptable" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Specifically, one of ordinary skill in the art would not have known how much continuous increase of the scale factor

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must be applied. All respective dependent claims inherit this problem and are accordingly rejected.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-12, 14-21, 23, 24, 26, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over West et al. (US 6,339,434), in view of Melen (US 6,320,979) and Morota et al. (US 6,919,921).

Regarding claim 1 (as interpreted), and similarly claims 2-4, 8, 17 and 23, West discloses

- applying a specific zooming scale factor to each of said lines of pixels and continuously increasing the scale factor from said bottom to said top to capture said scene in said near field, yet maintain resolution in said scene in said far field *resulting in any distortion in said view being acceptable* [Figs. 1, 2, 9; Col. 2, lines 26-40, especially, lines 37-40; Col. 3, lines 38-47; Col. 6, lines 8-16; Col. 7, lines 1-6; claim 31. Note that in Col. 2, line 35 a scaling factor in the range of 1/64x and 32x is disclosed and Fig. 9, when both images (90 and 92) are inverted (as an obvious variation), indicates an increasing scaling (i.e., zooming) factor from bottom to the top (with the factor at the top of the inverted image being 1x). Clearly, the inverted images indicate that the near field of the scene is captured and yet the resolution of the far field in the scene is maintained (since the number of pixels per image line remain the same). Note further that col. 2, lines 39-40

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indicate that whatever distortion that might exist will be acceptable since the resultant images are considered high quality]

West does not expressly disclose

- a digital network
- a camera connected to said digital network, said digital camera capturing said view of scene under surveillance and representing said scene under surveillance by said plurality of lines of pixels
- a computer (for applying the scaling) connected to said digital network.

However, Melen discloses a digital camera (which obviously can be used for surveillance purpose) [Figs. 3a, 3b; Fig. 6, ref. 308; Col. 3, lines 45-50], a general-purpose, digital computer [Fig. 6, ref. 306] and a computer-readable medium [Fig. 6, ref. 610]. In addition, Morota teaches/suggests a system that uses a digital network to connect a surveillance camera and a computer [Fig. 1, ref. 10 (digital network), 16 (surveillance cameras) and 18 (computers); fig. 3; col. 1, lines 22-27; col. 3, lines 16-47; col. 4, lines 43-60].

West, Melen and Morota are combinable because they have aspects that are from the same field of endeavor of image acquisition and processing.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify West with the teaching of Melen and Morota by using a digital surveillance video camera and a computer and connect them via a digital network. The motivation would have been to enable camera control terminals to display images and perform various camera control, as Morota indicated in [column 1, lines 28-34 and 61-64].

Therefore, it would have been obvious to combine Melen and Morota with West to obtain the inventions of claim 1.

12. Regarding claims 5-7, Melen further discloses a still digital camera (which obviously can be used for surveillance purpose) [Figs. 3a, 3b; Fig. 6, ref. 308; Col. 3, lines 45-50], a generous-purpose, digital computer [Fig. 6, ref. 306] and a computer-readable medium [Fig. 6, ref. 610].

13. Regarding claims 9, and similarly claims 18, 24 and 31, the combined invention of West, Melen and Morota further discloses

- said lines of pixels are horizontal lines of pixels
[West: Fig. 1, refs. 22, 24, 25. Note that only horizontal lines are scaled]
- said computer contains a computer program that applies a specific zooming scale factor to each of said horizontal lines of pixels and continuously increases the scale factor of said horizontal lines of pixels from said bottom to said top to capture said scene in said near field, yet maintain resolution in said scene in said far field
[Melen: Fig. 6, ref. 610 (program-containing medium). Also per the analysis of claim 1 regarding the zooming scaling function]

14. Regarding claim 10, and similarly claim 19, Melen further discloses

- (claim 10) said horizontal lines of pixels form a digital image and
[Fig. 6, ref. 308. Note that 308 is a digital camera and therefore the captured image is a digital image]

15. Regarding claim 11, and similarly claim 20, **official notice is taken** that digitizing photographic images (e.g., by using a scanner) so that digital image processing operations can be applied (e.g., by using Adobe® PhotoShop®) is widely practiced.

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Therefore, it would have been obvious to one of ordinary skill in the art to modify the combined invention of West, Melen and Morota by using photographic images so that the images can be transformed to achieve the desired effect.

16. Regarding claim 12, and similarly claims 21 and 26, West further discloses

- said lines of pixels are over-sampled
[Fig. 1; Fig. 2, refs. 26, 28; Col. 3, lines 38-47]

17. Regarding claim 14, and similarly claim 28, West further discloses

- said lines of pixels are over-sampled using graded zooming in a horizontal and a vertical directions
[Fig. 1. Note that the converters in 21 and 22 scale ("over-sample," or as interpreted, down-sample) in the vertical and the horizontal directions, respectively. For obviousness of graded zooming (i.e., using a varying scaling factor), see the analysis for claim 1]

18. Regarding claim 15, and similarly claim 29, West further discloses

- the number of said pixels used in said horizontal line of pixels is constant
[Fig. 9. Note that both the input image (the shaded area of image 90) and the output image (image 92, including the white area) are rectangular and have the same dimensions; therefore the number of pixels for the lines is a constant]
- the rate of over-sampling of said pixels is reduced from said bottom to said top
[Per the analysis of claim 1]
- according to a scale factor wherein said horizontal line of said pixels at said top of said scene is zoomed to 2X of that of said horizontal line of said pixels at said bottom of said scene
[Figs. 1, 2, 9; Col. 2, lines 26-40, especially, lines 37-40; Col. 3, lines 38-47; Col. 6, lines 8-16; Col. 7, lines 1-6; claim 31. Note that per the analysis of claim 1, West has taught a top-bottom zooming ratio of 2x which can be achieved if, for example, the zooming factor for the bottom line is 1/2x and for the top line is 1x (since it has taught using continuous zooming on a line-by-line basis using zooming factors of between 1/64x and 32x).

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19. Regarding claim 16, and similarly claim 30, per the analysis of claim 15 the combined invention of West, Melen and Morota teaches/suggests

- the number of said pixels used in said horizontal line of pixels is constant
- the rate of over-sampling of said pixels is reduced from said bottom to said top
- according to a scale factor wherein said horizontal line of said pixels at said top of said scene is zoomed to 2X of that of said horizontal line of said pixels at said bottom of said scene

In addition, West further teaches/suggests

- said bottom line is over-sampled at a rate of 2, while said top line is not over-sampled at all
[Similar analysis for claim 15 regarding the top-bottom zoom ratio applies, since over-sampling (interpreted as sampling) is equivalent to zooming when applied to images (e.g., zoom-in, which makes an image larger, is equivalent to up-sampling)]

Allowable Subject Matter

20. Claims 13, 22, 25 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and to overcome the rejection(s) under 35 U.S.C. 112, first paragraph, set forth in this Office action.

21. The following is a statement of reasons for the indication of allowable subject matter:

22. Regarding claim 13, and similarly claims 22, 25 and 27, closest art of record neither discloses nor teaches/suggests the use of the equation recited in the claim for any purpose.

Conclusion and Contact Information

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yubin Hung whose telephone number is (571) 272-7451. The examiner can normally be reached on 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yubin Hung
Patent Examiner
August 8, 2005



**SANJIV SHAH
PRIMARY EXAMINER**